

HP StorageWorks

FCA2684/FCA2684DC PCI-X Host Bus Adapters for OpenVMS and Tru64 UNIX release notes

These release notes contain driver and firmware updates and supplemental information for the HP StorageWorks FCA2684/FCA2684DC PCI-X host bus adapters for OpenVMS and Tru64 UNIX.

For the latest version of these release notes and other host bus adapter documentation, access the HP storage web site at <http://h18006.www1.hp.com/storage/saninfrastructure.html>.

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FCA2684/FCA2684DC PCI-X Host Bus Adapters for OpenVMS and Tru64 UNIX release notes

About this document

This section describes the content reflected in this document, including:

- [Release notes information](#), page 3
- [Intended audience](#), page 3
- [Other FCA2684/FCA2684DC PCI-X HBA documentation](#), page 3

Release notes information

These release notes contain the following major topics:

- [Alpha server platforms](#), page 4
- [HBA components](#), page 5
- [Troubleshooting](#), page 6
- [FCA2684/FCA2684DC restrictions](#), page 7

Intended audience

This document is intended for customers who purchased the HP StorageWorks FCA2684/FCA2684DC PCI-X Host Bus Adapter (HBA) for use in OpenVMS and Tru64 UNIX platforms.

Other FCA2684/FCA2684DC PCI-X HBA documentation

The FCA2684/FCA2684DC PCI-X HBA documentation, available on the HP web site <http://h18006.www1.hp.com/storage/saninfrastructure.html>, also includes the *HP StorageWorks FCA2684/FCA2684DC PCI-X Host Bus Adapter for OpenVMS and Tru64 UNIX Installation Guide*, part number AA-RV2JA-TE

Additional documentation, including white papers and best practices documents, are available on the following HP web site <http://www.hp.com>.

General information

The FCA2684/FCA2684DC PCI-X HBA for OpenVMS and Tru64 UNIX are high-performance PCI-X option modules that connect to devices attached through a switch based optical Fibre Channel fabric. These HBAs support only short wave multi-mode connections. This section describes:

- [Alpha server platforms](#), page 4
- [HBA components](#), page 5
- [Configuration information](#), page 5
- [Troubleshooting](#), page 6
- [FCA2684/FCA2684DC restrictions](#), page 7

Alpha server platforms

Table 1 lists the Alpha server platforms with the associated number of adapters that are supported per operating system configuration. Note the following:

- The minimum Alpha Console revision is v6.7.
- The total number of HBA ports installed cannot exceed Max Ports value.
- The FCA2684DC is not supported on the DS20E, ES40, and GS80/160/320 servers.

Table 1 Supported ALPHA server platforms, maximum HBAs, and maximum ports

	Tru64 UNIX			OpenVMS		
ALPHA SERVER	Single Channel	Dual Channel	Max Ports	Single Channel	Dual Channel	Max Ports
DS15	2	2	4	2	2	4
DS20E	4	0	4	4	0	4
DS25	4	2	4	4	2	4
ES40	6	0	6	6	0	6
ES45	6	4	8	6	4	8
ES47	64	32	64	26	13	26
ES80	64	32	64	26	13	26

Table 1 Supported ALPHA server platforms, maximum HBAs, and maximum ports (continued)

GS80	26	0	26	26	0	26
GS160	26	0	26	26	0	26
GS320	26	0	26	26	0	26
GS1280	64	32	64	26	13	26

HBA components

Table 2 describes the firmware and operating system revisions associated with these HBAs.

Table 2 HBA Components

Component	Firmware or operating system version
FCA2684 PCI-X 64-bit 133 MHz 2 Gb single port, part number DS-A5132-AA FCA2684 PCI-X 64-bit 133 MHz 2 Gb dual port, part number DS-A5134-AA	1.91a1
Open VMS	7.3-2, 8.2
Tru64	5.1B

For the latest HBA firmware and instructions for upgrading the firmware, please check the HP web site <http://welcome.hp.com/country/us/en/support.html>.

Configuration information

See the *HP StorageWorks SAN design reference guide*, for configuration information. This document is available on the following HP web site:

<http://h18006.www1.hp.com/products/storageworks/san/documentation.html>.

Troubleshooting

Use the following tips to troubleshoot FCA2684/FCA2684DC related problems:

- The Tru64 or OpenVMS patch revision and the FCA2684/FCA2684DC adapter firmware revision are critical. Make sure both have the correct versions installed.
- Check the system logs and the system error messages from the driver and investigate based on that information.
- Check the status of the HBA LEDs as described in the troubleshooting section of *HP StorageWorks FCA2684/FCA2684DC PCI-X Host Bus Adapter for OpenVMS and Tru64 UNIX Installation Guide*.
- Check the Fibre Channel addresses appearing and disappearing without reason, or other conditions that affect part of, or the entire Fibre Channel network. Check the fabric configuration including:
 - Checking the switches for port errors or other switch problems such as setup or firmware level
 - Cabling problems
 - Possible bad FCA2684/FCA2684DC adapter

FCA2684/FCA2684DC restrictions

FCA2684/FCA2684DC restrictions include:

- The minimum firmware revision of FCA2684/FCA2684DC for Alpha platforms on all operating systems is 1.90a4.
- The Maximum length of the OPTICAL cable from the FCA2684/FCA2684DC adapter to a hub or switch is 500 meters short wave multi mode 50/125 micron Fibre Channel Cable.

Tru64 UNIX restrictions

Tru64 UNIX restrictions include:

- The minimum version of the operating system that fully supports the FCA2684/FCA2684DC HBA is Tru64 UNIX V5.1B with New Hardware Delivery kit NHD7.
- NHD7 is required for Alpha Server DS15 support on Tru64 UNIX v5.1B
- The FCA2684/FCA2684DC driver for Tru64 UNIX is built into the NHD7.
- Tru64 UNIX only supports FCA2384 adapters in Fibre Channel switch topologies.
- See <http://www.tru64unix.compaq.com/support.html> for updates.

OpenVMS restrictions

OpenVMS restrictions include:

- The driver for OpenVMS is not built into the 7.3-2 base version of the operating system. The minimum supported driver is contained in Tima kit VMS732_FIBRE_SCSI-V0400.
- OpenVMS only supports FCA2684/FCA2684DC HBAs in Fibre Channel switch topologies. See the web site <http://ftp1.service.digital.com/public/vms/axp/> for updates.
- To install OpenVMS V7.3-2 and to add Fibre Channel HBAs, perform the following steps:
 1. Boot the OpenVMS installation CD and create a system disk on a local non-FC disk.
 2. Boot the new system disk.
 3. Install the FC Tima kit images.
 4. Install the HBA as described in the *HP StorageWorks FCA2684/FCA2684DC PCI-X Host Bus Adapter for OpenVMS and Tru64 UNIX Installation Guide*.
 5. Boot the system via the non-FC local system disk created in [step 1](#).
 6. To create a FC system disk, perform an image backup from the non-FC system disk to the targeted FC system disk.